

# **GALLATIN COUNTY, MONTANA NATIONAL SPATIAL DATA INFRASTRUCTURE (NSDI) COMMUNITY DEMONSTRATION PROJECT**

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## **WHERE IS GALLATIN COUNTY AND WHY IS IT A NSDI SITE?**

Gallatin County, Montana, a gateway community to Yellowstone National Park, experienced a 26.5% increase in population between 1990 and 1999. This rapid growth led to the expansion of county roads, the development of numerous subdivisions, and increased demand for community services. Gallatin County officials urged the public to become involved in planning a course for future county growth and development.

The County Planning Board and the County Commission initiated the Gallatin Plan program to define a collaborative and comprehensive land use policy for Gallatin County in order to support **Smart Growth**. The Plan's intention has been to be *environmentally smart*: protecting and enhancing the environment, air and water quality, and wildlife habitat; *fiscally smart*: paying for itself and providing high quality county services without constantly raising property taxes; and, *economically and socially smart*: promoting community economic vitality, livability, resource efficiency, equity, and a sense of place.

## **WHO ARE THE PARTNERS IN THE GALLATIN COUNTY PROJECT?**

Additional collaborative partners with the County Commissioners, County Planning Board, County Officers, and citizens of Gallatin County include the following:

- \$ U.S. Department of Agriculture's Forest Service and Natural Resource Conservation Service;
- \$ U.S. Department of the Interior's U.S. Geological Survey, National Park Service, and Bureau of Land Management;
- \$ Montana State University;
- \$ Montana Department of State Lands;
- \$ Gallatin Conservation District;
- \$ Montana Department of Fish, Wildlife, and Parks;
- \$ National Aeronautics and Space Administration;
- \$ National Partnership for Reinventing Government; and,
- \$ Environmental Systems Research Institute.

Further, the National Association of Counties has expressed interest in having Gallatin serve as a pilot study for county planning efforts throughout the country that seek to employ information technology as a means to aid county planning efforts.

Gallatin County leveraged their Federal funds for this project 7:1, through partnerships with state and local agencies, non-governmental organizations, and academic institutions. They were successful in establishing and maintaining not only Project goals, but also long term goals supporting the community's future needs. Countless monies were contributed through university staff expertise, county citizens and other volunteers.

## **HOW WE APPROACHED THE PROJECT**

Before 1996, there was virtually no data available at a scale useful for community planning efforts in Gallatin County. To remedy this gap, the County Planning Department, charged with developing a growth plan and gaining community approval and support for the plan, began facilitating GIS partnerships. Soon the NSDI Community Demonstration Project was formed.



At the first GIS collaborative meeting, each participant identified ten individuals they deemed as community leaders. Those identified were asked to name people they recognized as community leaders. The sequence was repeated until five individuals, consistently identified through these lists emerged. They served as project advisors. Twelve public meetings were held to generate the vision and approach for the planning effort and to engage community leaders.

The key elements to support the plan (agricultural lands, roads, land use, etc.) were identified through the public meetings. AGallatin Today®, a digital atlas containing information on the current status of the County and support by the Aurora Partnership, was developed with help from Montana State University (MSU). The Greater Yellowstone Area Data Clearinghouse, an NSDI compliant clearinghouse operated by MSU, provided web support. Local staff received meta data training and began documenting some pre-existing data. Federal partners provided the information they had about our County.

We soon recognized that growth is an important issue in Gallatin County. We developed an animation of well and septic permits by location over time. The planning Department then arranged to meet with various civic organizations at locations across the County to present the digital atlas, discuss the issue of growth, and engage the public in seeking a solution to the stresses created by rapid growth on public infrastructure, lands, and the natural environment.

Along the way key factions emerged representing the interests of agriculture, business, and conservation. Special focus groups comprised of representatives from each of these factions were asked to develop sustainable growth scenarios for Gallatin County's future. The groups utilized a rule-based decision support model, U-GROW, to explore options in real time based on geospatial data. Three options emerged that were consistent in key parameters when integrated. These options were then presented in a public forum which was the largest, best attended meeting in our County's history. Gallatin County now has its first truly comprehensive growth plan that continues with broad and active public participation.

#### **WHAT ARE THE RESULTS OF THE GALLATIN COUNTY PROJECT?**

Aside from sharing their lessons learned from the project with other local communities, Gallatin County plans to continue using the data, information, and tools acquired through this project as a baseline to support future models and decision support systems for decision-makers in the County. The Project afforded the county the opportunity to establish a link through intranet to the County Planning and Environmental Health offices along with other county departments. The County has also linked itself to the Planning Department and the Gallatin Plan resources via the World Wide Web. Additionally, the Greater Yellowstone Area Data Clearing house at Montana State University, operated by the Geographic Information and Analysis Center (GIAC), is providing web access to the data and information being used by the County in its Gallatin Plan Project.

Data and information used for the Gallatin Plan has been used for other significant purpose then for those originally intended. Soil, census, elevation, habitat, hydrography, and digital orthoimagery have proven to be useful and adequate for the general planning of the County. The County has taken every opportunity to provide transfer of knowledge about NSDI and Gallatin County Community Demonstration Project. Through their web site and other access to information they provide examples and support for neighboring communities as well as for communities throughout the nation.

#### **WHAT ARE THE GALLATIN COUNTY-S FUTURE PLANS FOR THE PROJECT?**

Gallatin County has a number of pending actions they hope to accomplish as a result of this Project. They are as follows:

- \$ develop meta data for all project data. (A grant to the County from NRIS allows staff to continue to work on this effort. More then 90% of the data used in this project has meta data available);
- \$ use decision support tools without allowing them to become the focus or obstacle in the planning and decision process; and,
- \$ develop improved public access to planning information on the web.



